



Eur päisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 992 672 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
28.02.2001 Bulletin 2001/09

(51) Int. Cl.⁷: **F02F 7/00**

(43) Date of publication A2:
12.04.2000 Bulletin 2000/15

(21) Application number: **99202955.3**

(22) Date of filing: **10.09.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **09.10.1998 GB 9822016**

(71) Applicants:
• **Cummins Engine Company, Ltd.**
Darlington, County Durham DL1 4PW (GB)
• **Iveco (UK) Ltd.**
Watford, Hertfordshire WD1 1SR (GB)

• **NEW HOLLAND U.K. LIMITED**
Basildon, Essex SS14 3AD (GB)

(72) Inventors:
• **Pierro, Enzo**
Nr. Abingdon, Oxon OX14 4LU (GB)
• **Rossi, Elio**
10019 Strambino (Torino) (IT)

(74) Representative:
Vandenbroucke, Alberic et al
New Holland Belgium NV.
Patent Department
Leon Claeysstraat, 3A
8210 Zedelgem (BE)

(54) **Engine block**

(57) An engine block is described having at one end a lateral flange 12 formed with an aperture 24 for mounting of an ancillary unit such as a pump 16. An adapter plate 30 is mounted on the end face of the lateral flange to overlie the aperture 24 for the ancillary unit 16, the surface of the adapter plate facing the aperture 24 being machined to mate, when in use, with the ancillary unit 16 disposed on the other side of the flange 12 and secured to the adapter plate 30 through the aperture 24 in the lateral flange.

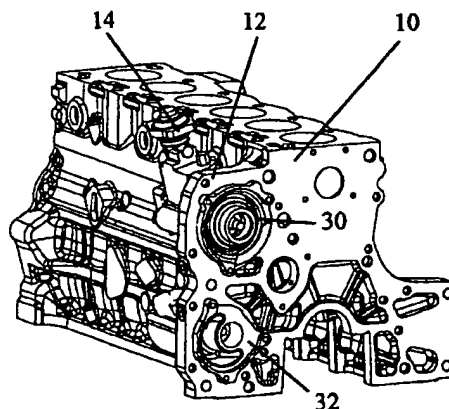


Fig. 3

EP 0 992 672 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 20 2955

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 196 23 774 A (AUDI NSU AUTO UNION AG) 2 January 1998 (1998-01-02)	1-4,8	F02F7/00
A	* figures 1,2 * * abstract * * claims 1-3 * * column 2, line 7 - line 63 *	5	
A	GB 2 026 599 A (LUCAS INDUSTRIES LTD) 6 February 1980 (1980-02-06) * figure 1 * * abstract * * claims 1-5 *	1-6	
A	US 5 458 100 A (NEUFELD EDWARD W) 17 October 1995 (1995-10-17) * figure 1 * * abstract * * column 2, line 21 - line 67 * * claims 1-10 *	1-6,9	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F02F F02B
Place of search THE HAGUE		Date of completion of the search 8 January 2001	Examiner Wassenaar, G
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 20 2955

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-01-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 19623774 A	02-01-1998	NONE	
GB 2026599 A	06-02-1980	ES 482036 A	01-10-1980
		FR 2431626 A	15-02-1980
		JP 55017686 A	07-02-1980
		US 4280454 A	28-07-1981
US 5458100 A	17-10-1995	CA 2153719 A	11-05-1996

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82